A SSOCIATES

This document is presented in the language it was provided. Ce document est présenté dans la langue dans laquelle il a été fourni.

> P.O. BOX 13593, STN. KANATA, OTTAWA, ON K2K 1X6 Telephone: (613) 838-5717 Website: www.ifsassociates.ca

> > April 20, 2021

URBAN FORESTRY & FOREST MANAGEMENT CONSULTING

Art Phillips Director of Development Larco Investments Ltd. 17th Floor, 900 West Georgia Street Vancouver, BC V6C 2W6 Committee of Adjustment Received | Reçu le

2023-03-23

City of Ottawa | Ville d'Ottawa Comité de dérogation

RE: TREE CONDITION ASSESSMENT - MAJOR'S HILL PARK / CHATEAU LAURIER

Dear Art,

Following the tree conservation report prepared by *IFS Associates Inc.* in October 2015, the tree protection report prepared in April 2019 and an updated tree condition report of October 2020, this report provides an assessment of the trees within 5m of the shared property line between Major's Hill Park (owned by the National Capital Commission - NCC) and 1 Rideau Street (Chateau Laurier, owned by Larco Investments Ltd.) in downtown Ottawa.

This report has been requested in anticipation of the construction of a major addition to the rear of the Chateau Laurier – work which is soon to commence. Field work for this report was completed in April 2021.

None of the trees on NCC land are expected to be impacted directly by the planned construction. However, the measures detailed in the tree protection report must be followed to ensure they suffer no construction related stress.

TREE SPECIES, CONDITION, SIZE AND STATUS

Table 1 below details the species, general health condition, size (diameter) and specific condition notes for the trees within 5m of the shared property line. Each tree is referenced by its number plotted on the accompanying plan.

Table 1. Species, health condition, diameter and condition notes of trees in Major's Hill Park within 5m of property line shared with 1 Rideau Street, Ottawa

Tree	Tree Species	Condition	D.B.H	Tree Condition Notes
No.		$(VP \rightarrow E)$	(cm)	
1	Colorado blue	Fair	27.0	Mature; crown asymmetric due to
	spruce			competition for sunlight with tree #2; living
	(Picea pungens var.			crown held low on west; good crown
	glauca)			density, growth increment and needle
				colour; moderate cone crop in 2020/21;
				introduced species



Table	1.	Continued
-------	----	-----------

	Continued			
2	Colorado blue spruce	Fair	27.2	Mature; crown held high due to inter- competition with surrounding trees; interior of crown dead; fair growth increment, crown density and needle colour; Pitch mass borer (<i>Synanthedon pini</i>) present; heavy cone crop in 2020/21
3	Colorado blue spruce	Fair	25.4	Mature; crown asymmetric towards west due to competition for sunlight with nearby serviceberry (<i>Amelanchier</i> spp.) and Manitoba maple (<i>Acer negundo</i>); good crown density, growth increment and needle colour; moderate cone crop in 2020/21
4	Colorado blue spruce	Fair	21.1	Maturing; lower crown dead due to inter- competition with surrounding trees and shading by (former) adjacent building; good growth increment, crown density and needle colour; Pitch mass borer present; moderate epicormic shoots present on bole in response to recent exposure to sunlight; minor cone crop in 2020/21
5	Colorado blue spruce	Fair	24.5	Mature; lower crown dead due to shading from surrounding trees and (former) adjacent building; good growth increment, crown density and needle colour; Pitch mass borer present; minor epicormic shoots present on bole in response to recent exposure to sunlight; minor cone crop in 2020/21
6	Colorado blue spruce	Fair	23.0	Mature; lower crown dead due to shading from surrounding trees; good growth increment, crown density and needle colour; Pitch mass borer present; minor cone crop in 2020/21
7	Colorado blue spruce	Fair	25.7	Mature; interior of crown dead; fair growth increment, crown density and needle colour; Pitch mass borer present; heavy epicormic shoots present on bole in response to recent exposure to sunlight; minor cone crop in 2020/21



Table 1. Continued

Table 1.	Continued			
8	Colorado blue spruce	Fair	21.2	Mature; lower crown dead (held at 2m) due to shading from surrounding trees; good growth increment, crown density and needle colour; minor cone crop in 2020/21
9	Colorado blue spruce	Fair	19.9	Mature; living crown held at 3m due to shading from surrounding trees and (former) adjacent building; fair growth increment, crown density and needle colour
10	Colorado blue spruce	Fair	28.6	Mature; living crown held low on west and at 3m elsewhere due to shading from surrounding trees; good growth increment, crown density and needle colour; minor cone crop in 2020/21
11	Colorado green spruce (Picea pungens)	Fair	19.7	Mature; crown held high and heavily asymmetric due to shading from nearby Amur maples; fair growth increment, crown density and needle colour; minor cone crop in 2020/21
12	Amur maple (Acer tataricum subsp. ginnala)	Poor	12 avg.	Very mature; six stemmed from grade – very broad crown; moderate basal sprouting; introduced invasive species
13	Amur maple	Poor	11 avg.	Overmature; two of five stems remaining at grade; heavy basal sprouting
14	Amur maple	Poor	12 avg.	Very mature; double stemmed from grade – both divergent towards north; basal sprouts removed for clearance from nearby Hydro transformer
15	Colorado blue spruce	Poor	19.3	Maturing; previous vine growth removed from crown; crown asymmetric towards southwest due to nearby Amur maple; poor growth increment, crown density and needle colour; minor cone crop in 2020/21
16	Colorado blue spruce	Fair	28.0	Mature; crown asymmetric towards east due to shading from nearby Amur maples; good growth increment, crown density and needle colour; minor cone crop in 2020/21
17	Colorado blue spruce	Fair	22.6	Mature; crown asymmetric towards east due to shading from nearby Amur maples; good growth increment, crown density and needle colour; minor cone crop in 2020/21



Table 1. Continued

	Continued			
18	Amur maple	Poor	14	Overmature; one stem remaining from grade; upright
19	Amur maple	Poor	17 avg.	Overmature; two stems remaining from
17	r mapie	1001	17 47 8.	grade; divergent
20	Colorado blue	Fair	26.1	Mature; crown asymmetric towards east
20		1'an	20.1	due to shading from nearby Amur maples;
	spruce			
				good growth increment, crown density and
01	0 1 1 11		10.1	needle colour; minor cone crop in 2020/21
21	Colorado blue	Fair	19.1	Maturing; interior of crown dead due to
	spruce			shade from adjacent maple – dead branches
				recently removed (living crown held high –
				6m from grade); previous vine growth
				removed from crown; fair growth
				increment, crown density and needle
				colour; minor cone crop in 2020/21
22	Colorado blue	Fair	18.1	Maturing; crown asymmetric towards west
	spruce			due to shading from nearby Amur maples;
				fair growth increment, crown density and
				needle colour; minor cone crop in 2020/21
23	Amur maple	Poor	24.1	Overmature; one of four stems remaining
	•			from grade; divergent towards west
24	Amur maple	Poor	11 avg.	Very mature; tri-stemmed from grade;
	-			Nectria canker (Neonectria galligena)
				present on lower boles; divergent towards
				west
25	Colorado blue	Fair	19.6	Maturing; interior of crown dead due to
-	spruce			shade from adjacent maples – dead
	T TT			branches recently removed; fair growth
				increment, crown density and needle
				colour; minor cone crop in 2020/21
26	Amur maple	Poor	10 avg,	Overmature; two stems remaining from
20		1 001	10 avg,	grade; mildly divergent towards south
27	Colorado blue	Very poor	13.8	Maturing; heavily shaded by nearby mature
21	spruce		13.0	Norway maple (<i>Acer platanoides</i>); growth
	spruce			
				form distorted by intense competition for
				sunlight; poor growth increment and crown
				density, fair needle colour; minor cone crop
				in 2020/21



Table 1. Continued

28	Colorado blue	Poor	14.3	Maturing; interior of crown dead due to
	spruce			shade from adjacent maples – dead
				branches recently removed; co-dominant
				stem removed at 1.5m on south; fair growth
				increment, crown density and needle
				colour; minor cone crop in 2020/21
29	Colorado blue	Fair	20.8	Maturing; lower crown very thin due to
	spruce			shaded by nearby mature Norway maple;
				crown apex clear of competition for
				sunlight; fair growth increment, crown
				density and needle colour where exposed to
				sunlight; minor cone crop in 2020/21
30	Colorado blue	Good	24.1	Mature; shaded by nearby mature Norway
	spruce			maple – narrow crown asymmetric towards
				north; dead branches recently removed;
				good growth increment, crown density and
				needle colour where exposed to sunlight;
				minor cone crop in 2020/21

¹ diameter at breast height, or 1.4m from grade (unless otherwise indicated)

Pictures 1 through 5 on pages 6, 7, 8 and 9 of this report show selected trees within Major's Hill Park adjacent to the rear of the subject property.

I trust this report satisfies your requirements. Please do not hesitate to contact the undersigned with any questions or comments you may have.

This report is subject to the attached Limitations of Tree Assessments and Liability to which the reader's attention is directed.

Yours,



Andrew K. Boyd, B.Sc.F, R.P.F. (#1828) Certified Arborist #ON-0496A and TRAQualified Consulting Urban Forester





Picture 1. Colorado spruce trees within Major's Hill Park adjacent to 1 Rideau Street (serviceberries in foreground)





Picture 2. Colorado spruce trees within Major's Hill Park adjacent to 1 Rideau Street





Picture 3. Colorado spruce and amur maple trees within Major's Hill Park adjacent to 1 Rideau Street



Picture 4. Colorado spruce and amur maple trees within Major's Hill Park adjacent to 1 Rideau Street





Picture 5. Colorado spruce trees within Major's Hill Park adjacent to 1 Rideau Street (shaded by mature Norway maple on right)



LIMITATIONS OF TREE ASSESSMENTS & LIABILITY

GENERAL

It is the policy of *IFS Associates Inc.* to attach the following clause regarding limitations. We do this to ensure that our clients are clearly aware of what is technically and professionally realistic in assessing trees for retention.

This report was carried out by *IFS Associates Inc.* at the request of the client. The information, interpretation and analysis expressed in this report are for the sole benefit and exclusive use of the client. Possession of this report or a copy thereof does not imply right of publication or use for any purpose by any other than the client to whom it is addressed. Unless otherwise required by law, neither all or any part of the contents of this report, nor copy thereof, shall be conveyed by anyone, including the client, to the public through public relations, news or other media, without the prior expressly written consent of the author, and especially as to value conclusions, identity of the author, or any reference to any professional society or institute or to any initialed designation conferred upon the author as stated in his qualifications.

This report and any values expressed herein represent the opinion of the author; his fee is in no way contingent upon the reporting of a specified value, a stipulated result, nor upon any finding to be reported. Details obtained from photographs, sketches, *etc.*, are intended as visual aids and are not to scale. They should not be construed as engineering reports or surveys. Although every effort has been made to ensure that this assessment is reasonably accurate, the tree(s) should be reassessed at least annually. The assessment presented in this report is valid at the time of the inspection only. The loss or alteration of any part of this report invalidates the entire report.

LIMITATIONS

The information contained in this report covers only the tree(s) in question and no others. It reflects the condition of the assessed tree(s) at the time of inspection and was limited to a visual examination of the accessible portions only. *IFS Associates Inc.* has prepared this report in a manner consistent with that level of care and skill ordinarily exercised by members of the forestry and arboricultural professions, subject to the time limits and physical constraints applicable to this report. The assessment of the tree(s) presented in this report has been made using accepted arboricultural techniques. These include a visual examination of the above-ground portions of each tree for structural defects, scars, cracks, cavities, external indications of decay such as fungal fruiting bodies, evidence of insect infestations, discoloured foliage, the condition of any visible root structures, the degree and direction of lean (if any), the general condition of the tree(s) and the surrounding site, and the proximity of people and property. Except where specifically noted in the report, the tree(s) examined were not dissected, cored, probed or climbed to gain further evidence of their structural condition. Also, unless otherwise noted, no detailed root collar examinations involving excavation were undertaken.

While reasonable efforts have been made to ensure that the tree(s) proposed for retention are healthy, no warranty or guarantee, expressed or implied, are offered that these trees, or any parts of them, will remain standing. This includes other trees on or off the property not

examined as part of this assignment. It is both professionally and practically impossible to predict with absolute certainty the behaviour of any single tree or groups of trees or their component parts in all circumstances, especially when within construction zones. Inevitably, a standing tree will always pose some risk. Most trees have the potential for failure in the event of root loss due to excavation and other construction-related impacts. This risk can only be eliminated through full tree removal.



Notwithstanding the recommendations and conclusions made in this report, it must be realized that trees are living organisms, and their health and vigour constantly change over time. They are not immune to changes in site conditions, or seasonal variations in the weather. It is a condition of this report that *IFS Associates Inc.* be notified of any changes in tree condition and be provided an opportunity to review or revise the recommendations within this report. Recognition of changes to a tree's condition requires expertise and extensive experience. It is recommended that *IFS Associates Inc.* be employed to re-inspect the tree(s) with sufficient frequency to detect if conditions have changed significantly.

ASSUMPTIONS

Statements made to *IFS Associates Inc.* in regards to the condition, history and location of the tree(s) are assumed to be correct. Unless indicated otherwise, all trees under investigation in this report are assumed to be on the client's property. A recent survey prepared by a Licensed Ontario Land Surveyor showing all relevant trees, both on and adjacent to the subject property, will be provided prior to the start of field work. The final version of the grading plan for the project will be provided prior to completion of the report. Any further changes to the grading plan invalidate this report, upon which it is based. *IFS Associates Inc.* must be provided the opportunity to revise the report in relation to any significant changes to the grading plan. The procurement of said survey and grading plan, and the costs associated with them both, are the responsibility of the client, not *IFS Associates Inc.*

LIABILITY

Without limiting the foregoing, no liability is assumed by *IFS Associates Inc.* for: 1) any legal description provided with respect to the property; 2) issues of title and/or ownership with respect to the property; 3) the accuracy of the property line locations or boundaries with respect to the property; 4) the accuracy of any other information provided by the client or third parties; 5) any consequential loss, injury or damages suffered by the client or any third parties, including but not limited to replacement costs, loss of use, earnings and business interruption; and, 6) the unauthorized distribution of the report.

INDEMNIFICATION

An applicant for a permit or other approval based on this report shall agree to indemnify and save harmless *IFS Associates Inc.* from any and all claims, demands, causes of action, losses, costs or damages that *IFS Associates Inc.* may suffer, incur or be liable for based on this report or from the performance or non-performance of the applicant, whether with or without negligence on the part of the applicant, or the applicant's employees, directors, contractors and agents.

Further, under no circumstances may any claims be initiated or commenced by the applicant against *IFS Associates Inc.* or any of its directors, officers, employees, contractors, agents or assessors, in contract or in tort, more than 12 months after the date of this report.

ONGOING SERVICES

IFS Associates Inc. accepts no responsibility for the implementation of any or all parts of the report, unless specifically requested to supervise the implementation or examine the results of activates recommended herein. In the event that examination or supervision is requested, that request shall be made in writing and the details, including fees, agreed to in advance.

